**K-5 Math Lesson Plan**

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| **Teacher:** | | **Grade: 2** | | | **Date(s)**: Day 4-5 |
| **Unit Title:**  Unit 1 - Understand Place Value (Hundreds, Tens, Ones) | | | **Corresponding Unit Task:**  Leading up to Task 2: Using the total number of each item in the school store inventory, represent each number multiple ways. Use base-ten blocks, place, and number words. | | |
| **Essential Question(s):** *ALL remain posted throughout entire unit*  How do I compose numbers up to 1,000?  How do you know the value of a number?  How do patterns help me skip count? | | | | | |
| **Materials/Resources** | | | | **Essential Vocabulary** | |
| **Teacher:**   * [BrainPop Jr. Place Value Video](http://www.brainpopjr.com/math/numbersense/placevalue/) * One microscope * [Place Value Chart Interactive](http://www.wmnet.org.uk/wmnet/custom/files_uploaded/uploaded_resources/853/PlaceValueChartv4.swf) * Chart paper * Place Value powerpoint   ***Engaging Scenario:*** *The PTA has chosen you to help organize and restock the school supply store. The store has some supplies leftover from last year. The PTA needs 1,000 of each item available in the school supply store. You will need to count the total number of pencils, erasers, glue sticks, paper, and crayons and determine how many more of each item the PTA needs to order. The PTA has a limited budget for our school supply store so it is important for you to get the exact numbers needed and report your findings to the PTA treasurer.* | | **Student:**   * Place value charts in sheet protectors *(the blank side is used for student responses in Guided Practice)* * Dry erase markers * Base tens * Post-it Notes * Netbooks/laptops if available | | **place value**  **hundreds/flats**  **tens/longs**  **ones/units**  skip count  counting on | |
| **Learning Experience** | | | | | |
| **8 Mathematical Practices:**  1. Make sense of problems and persevere in solving them.  2. Reason abstractly and quantitatively.  3. Construct viable arguments and critique the reasoning of others.  4. Model with mathematics.  5. Use appropriate tools strategically.  6. Attend to precision.  7. Look for and make use of structure.  8. Look for and express regularity in repeated reasoning. | **Common Core State Standards:**  **2.NBT.1** Understand that the 3-digits of a 3-digit number represent the amount of hundreds, tens, and ones. (Correlates to NCSCOS Math Objective 1.01a)  **2.NBT.3** Read and write numbers to 1,000 using base-ten numerals, number names, and expanded form. (Special Note: Expanded form will be taught in Unit 3.) (Correlates to NCSCOS Math Objective 1.01b) | | | | |
| **I Can Statement(s):**  I can use number names to read and write numbers to 1000.  **I can use base ten numerals to read and write numbers to 1000.**  **I can use expanded form to read and write numbers to 1000.** | | | | |
| **Activating Strategy/Hook:** (How will students become cognitively engaged and focused?)   1. All right scientists! The PTA is still depending on us to help them with the school supply store. They need your excellent skills as number scientists to complete this huge task they have. What is this? (microscope) A microscope is a tool scientists use to get a much closer look at a variety of things. It shows the scientist how things are made up. Today we will closer examine why the placement of numbers is so special! 2. I need your help! I found this number (869) under my car this morning and I need to know what this number is worth. Can you help me examine this number under our microscope. | | | | |
| **Teacher Directed:**   1. Using [BrainPop Jr. Place Value Video](http://www.brainpopjr.com/math/numbersense/placevalue/) teacher will closer examine place value and what each place means. Refer back to base ten blocks (flats, longs, and units). The position of the number tells you how many or the value of the number. 5 ones/units aren’t the same as 5 tens/longs. 2. Utilizing the Place Value Powerpoint (attached). Briefly explain expanded form by examining under our mathematical microscope the number, 531. Review number word form and introduce expanded form (to be taught in depth in unit 3) 500+30+1, 5 hundreds, 3 tens, 1 one. They can be written as 531. They all represent the same number. | | | | |
| **Guided Practice:**   1. Model a number story, such as “There are 7 tens, 1 one, and 9 hundreds.” Show the number in base tens on the document camera/overhead. Then students will write their answers and share with their shoulder partner. Students must explain what clues they used to arrive at their answer. Repeat using various numbers up to 1,000. 2. [Place Value Chart Interactive](http://www.wmnet.org.uk/wmnet/custom/files_uploaded/uploaded_resources/853/PlaceValueChartv4.swf) The website offers its own numbers that the students can come up to the projector and make selections. (HTU=hundreds, tens, units) | | | | |
| **Independent Practice:**   1. Divide the students into small groups and have them write or tell each other their own number stories. You may want them to use place value charts and base tens to help them solve. 2. Students can now do the [Place Value Chart Interactive](http://www.wmnet.org.uk/wmnet/custom/files_uploaded/uploaded_resources/853/PlaceValueChartv4.swf) with a partner on netbooks. Students ***must*** explain their reasoning with a partner. | | | | |
| **Closing/Summarizing Strategy:**   1. On a post-it note, have students respond to this question on chart paper: Why is the placement of numbers so important? The position/placement of the number tells you how many or the value of the number. 2. We have successfully learned how to represent a number in a variety of ways. I’m sure the PTA would be able to use the special skills you’ve learned to help them with the school supply closet. | | | | |
| **Differentiation Strategies** | | | | | |
| **Extension** | | **Intervention** | | | **Language Development** |
| [Place Value Activity](http://www.math-salamanders.com/images/printable-math-sheets-place-value-hundreds-tens-ones-5.gif)  *(Can be done on board with a marker or as an independent task, use base tens to model)* | | Destination Math   |  | | --- | | Course II:  Module: Number Sense Unit: Numbers to 999 Session: Place Value: Tens and Ones  Module: Number Sense Unit: Numbers to 999 Session: Place Value: Hundreds, Tens, and Ones  Module: Number Sense Unit: Numbers to 999 Session: Expanded Form and Equivalent Representations of a Number | | | | Pre-teach vocabulary: represent Include number words and place value chart in students’ personal dictionaries. |
| **Assessment(s):**   1. Post-it responses 2. [Quick Place Value Assessment](http://www.math-salamanders.com/images/second-grade-place-value-worksheets-hundreds-tens-ones-3.gif) | | | | | |
| **Teacher Reflection:** (Next steps?) | | | | | |